

REMARKS

Reconsideration of the present application in view of the above amendments and the following remarks is respectfully requested.

Claims 1-8, 10, 12, 14-16, 18-58, 61, 62, 71, 72, 75, 77-79, 83, 85, 86, 89-92, 94-103, 107, 108 and 110-112 were pending. To facilitate allowance, claims 1-8, 10, 12, 14-16, 18-58, 61, 62, 71, 72, 75, 77-79, 83, 85, 86, 89-92, 97-103, 107, 108, 111 and 112 have been canceled without acquiescing to the rejections in the Office Action or prejudice to future prosecution of these claims in a related application. Accordingly, claims 94-96 and 110 are pending.

Claims 94-96 and 110 have been amended. Claims 94-96 have been rewritten in independent form by including the features of base claim 77. Claim 110 has been amended to correct a typographical error – namely, claim 110 is directed to a protein, so SEQ ID NO:329, which corresponds to a nucleotide sequence, was replaced with SEQ ID NO:330, which corresponds to an amino acid sequence. In addition, amino acid sequences of SEQ ID NOS:326, 328, 374, 376 and 378 have been added to claim 110. Each of SEQ ID NOS:326, 328, 330, 374, 376 and 378 correspond to amino acid sequences referred to in the application as G28-1 scFv VHL11S (CSS-S)H WCH2 WCH3, G28-1 scFv VH L11S (CSC-S)H WCH2 WCH3, G28-1 scFv VH L11S (SSC-P)H WCH2 WCH3, G28-1 scFv VH L11S (SCS-S)H WCH2 WCH3, G28-1 scFv VH L11S (CCS-P)H WCH2 WCH3, and G28-1 scFv VHL11S (SCC-P)H WCH2 WCH3, respectively. Furthermore, claim 110 has been amended to recite “amino acids 21-493,” rather than the full length amino acid sequence, as set forth in SEQ ID NO:326, 328, 330, 374, 376 or 378. The first 20 amino acids of the above-listed sequences are identical to each other and constitute a signal peptide (also referred to as “leader sequence”), which is not part of the mature single chain protein. As shown in the enclosed alignment between the first twenty amino acids of SEQ ID NO:326 and a mouse anti-human-HLA-DR immunoglobulin kappa light chain variable region (GenBank Accession No. AAL04012.1), the first twenty amino acids of SEQ ID NO:326 is homologous to the first 20 amino acid signal peptide of the mouse anti-human-HLA-DR immunoglobulin kappa light chain variable region. Applicants also enclose the description

of GenBank AAL04012, which describes the first 20 amino acids as a signal peptide. Support for the amendments to claim 110 may be found, for example, in Examples 67-69 and 96-98 on pages 249-250, 260 and 261 and the sequences on pages 408, 409, 423 and 424 of the substitute specification filed June 8, 2007. No new matter has been added via the amendments to the claims.

The specification has been amended to remove priority claims to earlier applications. Such removal has been made without acquiescing to the priority determination in the Office Action. No new matter has been added via the amendments to the specification.

The sequence listing filed January 30, 2004, includes 17 sequences (SEQ ID Nos. 520-527, 639, 640, 643, 646, 680, 681, 688, 689 and 699) that were not disclosed in the application as originally filed. Accordingly, a new sequence listing is provided herewith that merely eliminates the aforementioned sequences and replaces them with "null" identifiers. Additionally, the application has been amended to insert the paragraph that incorporates the text copy of the Sequence Listing, as filed electronically via EFS-Web. The new sequence listing includes no new matter. Applicants respectfully submit that the above-identified application is now in compliance with 37 C.F.R. §§ 1.821-1.825 and WIPO Standard 25.

#### Rejections Under 35 U.S.C. 103(a) and 112, First and Second Paragraphs

Claims 1-8, 10, 12, 14-16, 18-28, 31-58, 61, 62, 71, 72, 75, 77-79, 111 and 112 stand rejected under one or more of 35 U.S.C. 103(a) and 112, first and second paragraphs, as obvious, not enabled, and/or indefinite.

To expedite allowance and without acquiescing to the above rejections, Applicants have canceled claims 1-8, 10, 12, 14-16, 18-28, 31-58, 61, 62, 71, 72, 75, 77-79, 111 and 112. Accordingly, these grounds for rejection have been rendered moot.

#### Claim Allowance and Objection

Claim 110 was allowed and claims 83, 85, 86, 89-92, 94-103, 107 and 108 were objected to as dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As an initial matter, Applicants thank the Examiner for allowing claim 110. Applicants have amended this claim to correct a typographical error as described in the Remarks above. Furthermore, claim 110 now recites two additional specific G28-I single chain proteins (*i.e.*, SEQ ID NOS:326 and 328, which are in addition to SEQ ID NO:330). Accordingly, similar to SEQ ID NO:330, Applicants submit that amended claim 110 remains allowable. Also, Applicants note that they wish to pursue claims 83, 85, 86, 89-92, 97-101, 107 and 108 in a continuation application and thus have canceled these claims from the present application. Finally, Applicants have canceled claims 102 and 103 because they were dependent on a previously canceled base claim.

For the instant application, Applicants have written claims 94-96 in independent form to include all the features of claim 77 to which previously pending claims 94-96 referred. Accordingly, Applicants submit that the above objection has been obviated and claims 94-96 are now allowable.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Applicants believe that claims 94-96 and 110 remaining in the application are now allowable. Favorable consideration and a Notice of Allowance are earnestly solicited.

Respectfully submitted,  
SEED Intellectual Property Law Group PLLC

/Qing Lin/  
Qing Lin, Ph.D.  
Registration No. 53,937

Enclosures:

Alignment between Amino Acids 1-20 With Anti-human-HLA-DR Immunoglobulin  
Kappa Light Chain Variable Region [Mus musculus] (GenBank Accession No.  
AAL04012)  
GenBank Accession No. AAL04012

Application No. 10/627,556  
Reply to Office Action dated November 26, 2008

QXL:kw

701 Fifth Avenue, Suite 5400  
Seattle, Washington 98104-7092  
Phone: (206) 622-4900  
Fax: (206) 682-6031



1331818\_1.DOC

ALIGNMENT BETWEEN FIRST 20 AMINO ACIDS OF SEQ ID NO:326 AND AAL04012.1

```

M V V T A G V L G L L L L W L T G G R S Majority
-----+-----
              10              20
-----+-----
1 M V S T A G F L G L L L L W L T G G R S Amino acids 1-20 of SEQ ID NO:326
1 M S V P T Q V L G L L L L W L T G A R C Amino acids 1-20 of AAL04012.1

```

My NCBI  
[\[Sign In\]](#) [\[Register\]](#)

PubMed	Nucleotide	Protein	Genome	Structure	PMC	Taxonomy	OMIM	Books
Search: <input type="text" value="Protein"/> <input type="text" value="10"/> <input type="button" value="Go"/> <input type="button" value="Clear"/>								
Display: <input type="text" value="GenPept"/> <input type="text" value="20"/> <input type="button" value="Send to"/>								
Change from: <input type="text" value="begin"/> <input type="text" value="end"/> <input type="button" value="Features"/> <input checked="" type="checkbox"/> <input type="button" value="EPD"/> <input type="button" value="+"/> <input type="button" value="Refresh"/>								

☐ 1: [AAL04012](#). Reports anti-human-HLA-DR...[gi:15625291]

 BLINK, Conserved  
 Domains, Links

### Features Sequence

LOCUS AAL04012 127 aa linear ROD 16-SEP-2001  
 DEFINITION anti-human-HLA-DR immunoglobulin kappa light chain variable region  
 [Mus musculus].  
 ACCESSION AAL04012  
 VERSION AAL04012.1 GI:15625291  
 DBSOURCE locus AF281860 accession [AF281860.1](#)  
 KEYWORDS .  
 SOURCE Mus musculus (house mouse)  
 ORGANISM Mus musculus  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;  
 Sciurognathi; Muroidea; Muridae; Murinae; Mus.  
 REFERENCE 1 (residues 1 to 127)  
 AUTHORS Kostelny, S.A., Link, B.K., Tso, J.Y., Vasquez, M., Jorgensen, B.H.,  
 Wang, H., Hall, W.C. and Weiner, G.J.  
 TITLE Humanization and characterization of the anti-HLA-DR antibody 1D10  
 JOURNAL Int. J. Cancer 93 (4), 556-565 (2001)  
 PUBMED [11477560](#)  
 REFERENCE 2 (residues 1 to 127)  
 AUTHORS Kostelny, S.K. and Tso, J.Y.  
 TITLE Direct Submission  
 JOURNAL Submitted (23-JUN-2000) Research, Protein Design Labs, Inc., 34801  
 Campus Drive, Fremont, CA 94555, USA  
 COMMENT Method: conceptual translation supplied by author.  
 FEATURES  
 source  
 1..127  
 /organism="Mus musculus"  
 /strain="BALB/c"  
 /db\_xref="taxon:10090"  
 /chromosome="6"  
 /cell\_line="1D10"  
 /cell\_type="hybridoma"  
 1..>127  
 /product="anti-human-HLA-DR immunoglobulin kappa light  
 chain variable region"  
 sig\_peptide  
 1..20  
 Region  
 21..127  
 /region\_name="V-set"  
 /note="Immunoglobulin V-set domain; pfam07686"  
 /db\_xref="CDD:116300"  
 31..127  
 /region\_name="IGv"  
 /note="Immunoglobulin domain variable region (v)  
 subfamily; members of the IGv subfamily are components of  
 immunoglobulins and T-cell receptors. In immunoglobulins,

```
each chain is composed of one variable domain (IGv) and
one or more constant domains (IGc)...; cd00099"
/db_xref="CDD:28982"
Site      order(52,54,69,72..73,111)
          /site_type="other"
          /note="antigen binding site"
          /db_xref="CDD:28982"
Site      order(54,56,58,66,69,107,118)
          /site_type="other"
          /note="heterodimer interface"
          /db_xref="CDD:28982"
CDS       1..127
          /coded_by="AF281860.1:1...>381"
ORIGIN
    1 msvptqvlgl lllwltgarc diqmtgspas lsasvgetvt itcraseny sylawyqqkq
   61 gkspqllvsn aktlaegvts rfsgsgsgkq fskinslqp edfgnyycqh hygnaypfpg
  121 gtleik
//
```

[Disclaimer](#) | [Write to the Help Desk](#)  
NCBI | NLM | NIH

Last update: Mon. 12 Jan 2009 Rev. 149544